

1 IN THE CLAIMS

1 1-2 (canceled)

1 3. (currently amended) ~~The system as defined in claim 2~~
2 A hydrofoil system for lifting a boat out of water an
3 amount sufficient to reduce drag while still allowing the
4 boat to be powered by a conventional inboard-outboard
5 drive, wherein the boat has a hull with a bottom, a bow,
6 a stern with port and starboard trim tabs, and a
7 substantial center which is intermediate the bow of the
8 hull and the stern of the hull, said system comprising:
9 a) a front hydrofoil unit;
10 b) a center hydrofoil unit; and
11 c) a pair of rear hydrofoil units;
12 wherein said front hydrofoil unit depends from the bottom
13 of the hull at the bow thereof;
14 wherein said pair of rear hydrofoil units depend from the
15 port and starboard trim tab units of the hull,
16 respectively; and
17 wherein said center hydrofoil unit depend from the bottom
18 of the hull at the substantial center thereof, wherein
19 said front hydrofoil unit comprises a mounting portion;
20 wherein said front hydrofoil unit comprises a hydrofoil
21 portion;
22 wherein said mounting portion of said front hydrofoil
23 unit is for mounting to the bottom of the hull at the bow
24 thereof;

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 2 of 10

25 wherein said mounting portion of said front hydrofoil
26 unit depends from the bottom of the hull at the bow
27 thereof;
28 wherein said hydrofoil portion of said front hydrofoil
29 unit mounts to said mounting portion of said front
30 hydrofoil unit; and
31 wherein said hydrofoil portion of said front hydrofoil
32 unit depends from said mounting portion of said front
33 hydrofoil unit, wherein said mounting portion of said
34 front hydrofoil unit comprises a pair of upper plates;
35 wherein said pair of upper plates of said mounting
36 portion of said front hydrofoil unit are disposed in a
37 V-shape along a common edge thereof;
38 wherein said pair of upper plates of said mounting
39 portion of said front hydrofoil unit are for mounting to
40 the bottom of the hull at the bow thereof; and
41 wherein said pair of upper plates of said mounting
42 portion of said front hydrofoil unit ~~are for depending~~
43 depend from the bottom of the hull at the bow thereof.

1 4. (currently amended) The system as defined in claim[[,]]
2 3, wherein said pair of upper plates of said mounting
3 portion of said front hydrofoil unit have through bores.

1 5. (original) The system as defined in claim 3, wherein
2 said mounting portion of said front hydrofoil unit
3 comprises a stanchion; and
4 wherein said stanchion of said mounting portion of said
5 front hydrofoil unit depends along said common edge of

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 3 of 10

6 said pair of upper plates of said mounting portion of
7 said front hydrofoil unit.

1 6. (original) The system as defined in claim 5, wherein
2 said mounting portion of said front hydrofoil unit
3 comprises a lower plate; and
4 wherein said lower plate of said mounting portion of said
5 front hydrofoil unit depends from said stanchion of said
6 mounting portion of said front hydrofoil unit.

1 7. (original) The system as defined in claim 6, wherein
2 said lower plate of said mounting portion of said front
3 hydrofoil unit contains through bores.

1 8. (original) The system as defined in claim 6, wherein
2 said mounting portion of said front hydrofoil unit
3 comprises a pair of struts;
4 wherein said pair of struts of said mounting portion of
5 said front hydrofoil unit extend from said pair of upper
6 plates of said mounting portion of said front hydrofoil
7 unit to said lower plate of said mounting portion of said
8 front hydrofoil unit, respectively.

1 9. (original) The system as defined in claim 7, wherein
2 said hydrofoil portion of said front hydrofoil unit
3 comprises an upper plate;
4 wherein said upper plate of said hydrofoil portion of
5 said front hydrofoil unit attaches to said lower plate

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 4 of 10

6 of said mounting portion of said front hydrofoil unit;
7 and
8 wherein said upper plate of said hydrofoil portion of
9 said front hydrofoil unit depends from said lower plate
10 of said mounting portion of said front hydrofoil unit.

1 10. (original) The system as defined in claim 9, wherein
2 said upper plate of said hydrofoil portion of said front
3 hydrofoil unit contains through bores;
4 wherein said through bores in said upper plate of said
5 hydrofoil portion of said front hydrofoil unit align with
6 said through bores in said lower plate of said mounting
7 portion of said front hydrofoil unit so as to form
8 aligned through bores; and
9 wherein said aligned through bores receive upper bolts.

1 11. (original) The system as defined in claim 9, wherein
2 said hydrofoil portion of said front hydrofoil unit
3 comprises an extension; and
4 wherein said extension of said hydrofoil portion of said
5 front hydrofoil unit depends from said upper plate of
6 said hydrofoil portion of said front hydrofoil unit.

1 12. (original) The system as defined in claim 11, wherein
2 said hydrofoil portion of said front hydrofoil unit
3 comprises a lower plate; and
4 wherein said lower plate of said hydrofoil portion of
5 said front hydrofoil unit depends from said extension of
6 said hydrofoil portion of said front hydrofoil unit.

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 5 of 10

7 13. (original) The system as defined in claim 12, wherein
8 said lower plate of said hydrofoil portion of said front
9 hydrofoil unit has through bores.

1 14. (original) The system as defined in claim 13, wherein
2 said hydrofoil portion of said front hydrofoil unit
3 comprises a stanchion;
4 wherein said stanchion of said hydrofoil portion of said
5 front hydrofoil unit attaches to said lower plate of said
6 hydrofoil portion of said front hydrofoil unit; and
7 wherein said stanchion of said hydrofoil portion of said
8 front hydrofoil unit depends from said lower plate of
9 said hydrofoil portion of said front hydrofoil unit.

1 15. (original) The system as defined in claim 14, wherein
2 said stanchion of said hydrofoil portion of said front
3 hydrofoil unit has through bores;
4 wherein said through bores in said stanchion of said
5 hydrofoil portion of said front hydrofoil unit align with
6 said through bores in said lower plate of said hydrofoil
7 portion of said front hydrofoil unit so as to form
8 aligned through bores; and
9 wherein said aligned through bores receive lower bolts.

1 16. (original) The system as defined in claim 14, wherein
2 said hydrofoil portion of said front hydrofoil unit
3 comprises a hydrofoil;

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 6 of 10

4 wherein said hydrofoil of said hydrofoil portion of said
5 front hydrofoil unit depends from said stanchion of said
6 hydrofoil portion of said front hydrofoil unit; and
7 wherein said hydrofoil of said hydrofoil portion of said
8 front hydrofoil unit extends equidistantly out from said
9 stanchion of said hydrofoil portion of said front
10 hydrofoil unit.

1 17. (currently amended) The system as defined in claim [[1]]
2 3, wherein said center hydrofoil unit comprises a pair
3 of stanchions;
4 wherein said center hydrofoil unit comprises a hydrofoil;
5 wherein said pair of stanchions of said center hydrofoil
6 unit are for mounting to the bottom of the hull at the
7 substantial center thereof;
8 wherein said pair of stanchions of said center hydrofoil
9 unit ~~are for depending~~ depend from the bottom of the hull
10 at the substantial center thereof; and
11 wherein said pair of stanchions of said center hydrofoil
12 unit are for straddling the bottom of the hull at the
13 substantial center thereof.

1 18. (original) The system as defined in claim 17, wherein
2 said hydrofoil of said center hydrofoil unit depends from
3 said pair of stanchions of said center hydrofoil unit;
4 and
5 wherein said hydrofoil of said center hydrofoil unit
6 extends equidistantly outwardly from said pair of
7 stanchions of said center hydrofoil unit.

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 7 of 10

1 19. (currently amended) The system as defined in claim [[1]]
2 3, wherein each rear hydrofoil unit comprises a pair of
3 stanchions;
4 wherein each rear hydrofoil unit comprises a hydrofoil;
5 wherein said pair of stanchions of each rear hydrofoil
6 unit are for mounting to an associated one of the port
7 and starboard trim tabs; and
8 wherein said pair of stanchions of each rear hydrofoil
9 unit ~~are for depending~~ depend from the associated one of
10 the port and starboard trim tabs.

1 20. (original) The system as defined in claim 19, wherein
2 each stanchion of each rear hydrofoil unit is inverted
3 L-shaped;
4 wherein each stanchion of each rear hydrofoil unit has
5 a vertical portion;
6 wherein each stanchion of each rear hydrofoil unit has
7 a horizontal portion; and
8 wherein said horizontal portion extends outwardly from
9 said vertical portion thereof.

1 21. (original) The system as defined in claim 20, wherein
2 said horizontal portion of each stanchion of each rear
3 hydrofoil unit has through bores; and
4 wherein said through bores in said horizontal portion of
5 each stanchion of each rear hydrofoil unit are for
6 receiving screws for attaching said pair of rear
7 hydrofoil units to the port and starboard trim tabs,
8 respectively.

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 8 of 10

1 22. (original) The system as defined in claim 20, wherein
2 said hydrofoil of each rear hydrofoil unit depends from
3 said pair of stanchions of an associated rear hydrofoil
4 unit; and
5 wherein said hydrofoil of each rear hydrofoil unit
6 extends equidistantly outwardly from said pair of
7 stanchions of said associated rear hydrofoil unit.

Paper No.: 4

S.N.: 10/634981

Agt. Doc. No.: TOSR18A Page 9 of 10